Public Works (190 6) Department.

G.O., No. 367 & 375

DATED 10th January 1906.

90 copies of G.O.
3

22 copies of Endt. with docket at the back for the G. of I.
2

30 copies of Endt. for accounts

12—1—06

[Despatch Abstract.]

~~Certain~~ Tanks connected with the Periyar Project

Estimates for improvements to certain ———, sanctioned and ordered that a copy of these Pros: be forwarded to the Govt. of India.

Tanks connected with the Periyar Project.

Forwarding a copy of the Pros: sanctioning estimates for improvements to certain ———

FEJ
IV

Indexed. 11/1/06

Registered
M.S.
11.1.06.

[P. W. 38. 2,000—7-7-05.]

MK
10-1-06

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNT.

Government {1906} of Madras.

PUBLIC WORKS.

Recd. } 1906. *Enclosures*

Regd. *Spare copies*

G.O., Nos. 36, 37 I., 10th January 1906.

JANUARY.

Tanks connected with the Periyar Project

Forwarding a copy of the Proceedings sanctioning estimates for improvements to certain —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers :—

From the Superintending Engineer, VI Circle, dated 2nd October 1905, No. 656 C.E.

ENCLOSURES.

REPORT to accompany the estimate for repairs and improvements to Nos. 64 and 63 Devani and Ullikudy kanmoy of Melur taluk.

Amount of estimate—	RS.
Improvements	1,590
Repairs	495
Total ...	2,085

General.—Ullikudy and Devani tanks are two separate ones, originally not included in the list of tanks to be maintained as per G.O., No. 176 I, dated 20th February 1897, but subsequently included in the revised list approved by the Collector of Madura in his R. Dis. No. 893 Rev. of 1902, dated 2nd August 1902, and it is now proposed to form the two into a big tank for the following reasons :—

(i) The tanks are situate close to each other, their bunds also being contiguous.

(ii) The F.T.L. of both is the same.

(iii) Surplus of upper tanks enter both the tanks, but the surplus entering each cannot be separated without costly arrangements.

(iv) The cost of improving the combined tank will be a little cheaper than that of maintaining the tanks separately.

Source of supply.—The tanks, though chiefly dependent for their supply from their catchment area, yet receives Periyár supply from VI E. distributary, B_{12}.

Surplus arrangements.—The tanks surplus through the two breaches in the bund—one at the right flank of Ullikudy and the other at the left flank of Devani. As this method of disposal of surplus constantly gives rise to wastage of water and trouble to ryots, it is proposed to construct two vented weirs, one at each flank of the combined tank to discharge the total maximum quantity estimated as likely to enter the tank.

Sluices.—The ayacut under the tank is now irrigated by means of four country pot sluices. These will now be replaced by three cement pipe sluices with regulating arrangements as per plan and estimate attached.

REPORT to accompany the estimate for improving No. 111 Poolangudy kanmoy in Melur taluk.

Amount of estimate—	RS.
Improvements	1,460
Repairs	75
Total ...	1,535

General.—The tank is one of those included in the revised list of tanks to be maintained, submitted to the Superintending Engineer, VI Circle, with this office No. 112/S.E., dated 24th February 1902, and approved by the Collector of Madura in his No. 893/Rev., dated 2nd August 1902.

Source of supply.—In addition to the supply from its own free basin it receives the surplus of No. 22 Suruthur kanmoy and Periyár water from sluice No. 35, left bank in B_{12}.

Surplus arrangements.—The surplus is at present disposed of through open cuts at the right flank leading to wastage of water. It is proposed to construct a calingula 78′ long with dam stones 9″ high at intervals of every 3′ to discharge the total maximum quantity estimated as likely to enter the tank.

Sluices and ayacut.—There are at present four pot sluices and a masonry sluice in the tank for the irrigation of its ayacut of about 141 acres of which about 50 acres are inam lands. Provision is made in the estimate for replacing these pot sluices by two (one masonry and one pipe sluice) sluices. As the front head and barrel of the existing masonry sluice is out of order beyond all repairs, it is proposed to replace it by a pipe sluice.

Bund.—The bund which is low and weak in some places is proposed to be raised to a height of 3′ above M.W.L., with a top width of 4′ and side slopes $1\frac{1}{2}$ to 1 both in front and rear; and an estimate amounting to Rs. 75 has been sanctioned by the Executive Engineer.

Submergence.—No consideration need be paid regarding the submergence of the extent of 8·74 acres of patta lands under F.T.L. as such submergence is only mamool and as the F.T.L. of the tank which has been fixed with reference to the local enquiries and water-marks observed is in no way interfered with.

REPORT to accompany the estimate for improvements and repairs to No. 22 Suruthur tank, Melur taluk.

Amount of estimate—	RS.
Improvements	1,820
Repairs	85
Total ...	1,905

General.—This tank is included in the revised list of tanks to be maintained in Melur taluk submitted with this office No. 112/S.E., dated 24th February 1902, and approved by the Collector of Madura in his R. Dis. No. 893/Rev., dated 2nd August 1902.

Source of supply.—In addition to the supply from the drainage area, the tank receives Periyár water from the channel taking off from sluice No. 35 in B_{12}.

Surplus arrangements.—As the present system of disposing the surplus through open cuts at the right flank leads to wastage of water, and as the ryots find it inconvenient to close the cuts every now and then for storing water to F.T.L., it is proposed to construct a calingula 60′ 6″ long to discharge the tolal maximum quantity estimated as likely to enter the tank.

Ayacut and sluices.—The ayacut of 207·44 acres including that of Kotta kanmoy, a small urani close by, is now irrigated by means of country pot sluices which are now proposed to be replaced by four cement pipe sluices at suitable sites to command the whole area.

Bund.—It will be seen that the bund is weak in places requiring raising and strengthening. It is now proposed to raise it to a height of 3′ above M.W.L. with a top width of 4′ and side slopes $1\frac{1}{2}$ to 1 both in front and rear. An estimate, amounting to Rs. 85, for the repairs has been sanctioned by the Executive Engineer.

The submergence of 11·17 acres of patta land detailed in the statement attached is only mamool and need not be acquired. The F.T.L. has been fixed with reference to the water-marks left on the foreshore and on the back and local enquiries made.

(Signed) A. V. RAMALINGA AIYAR,
Executive Engineer, Madura Division.

Note by the Chief Engineer for Irrigation.

	Estimate.
	RS.
(1) Suruthur tank	1,820
(2) Poolangudy tank	1,460
(3) Devani and Ulligudy tanks ...	1,590

The Superintending Engineer, VI Circle, submits estimates for improving the marginally-noted tanks connected with the Periyár project. It is reported that the tanks have no proper surplus works in consequence of which there is considerable wastage of water. It is therefore proposed to construct two calingulas, one in each of the first two tanks in order to discharge the maximum quantity of water likely to enter them. With regard to the Devani and Ulligudy tanks, it is proposed to form them into one tank as their bunds are contiguous and their F.T.L. the same, and to construct two calingulas, one at each flank of the combined tank. Provision is also made in the estimates for replacing the existing pot sluices by masonry and cement pipe sluices. The above estimates have been increased to Rs. 2,020, Rs. 1,660 and Rs. 1,820, respectively, owing to alterations made in this office in the designs of the calingulas and sluices, which are indicated on the plans. The designs have not been carefully adopted to the conditions of each case. The estimates as altered are recommended for sanction.

4th January 1906.

(Signed) F. J. WILSON,
Chief Engineer for Irrigation.

ORDER—No. 36 I., dated 10th January 1906.

The following estimates are sanctioned :—

Imperial.

Irrigation.

49. Capital expenditure not charged to Revenue.

Periyár Project.

Open Capital Account.

I. Works.

3. Distributaries.

C. Works.

Unremunerative Work.

(1) Improving the Suruthur tank.

Estimate—	RS.
I. Works	2,020
II. Establishment	465
Total ...	2,485

(2) Improving the Poolangudy tank.

Estimate—	
I. Works	1,660
II. Establishment	382
Total ...	2,042

(3) Improving the Devani and Ulligudy tanks.

Estimate—	
I. Works	1,820
II. Establishment	419
Total ...	2,239

2. These sanctions are registered as No. 171 I. of 1905–1906 and will expire on the 31st March 1907.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. 37 I., dated 10th January 1906.]

(True Extract.)

(Signed) F. J. WILSON,
Joint Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, VI Circle (with plans and estimates).
" Examiner, Public Works Accounts.

ENDORSEMENT—No. 37 I., dated 10th January 1906.

Forwarded.

(By order.)

(Signed) F. J. WILSON,
Joint Secretary to Government,
Irrigation Branch.

Exd. T. Lutchmiah Naidu.

CURRENT FILE.

Stock Form No. 141
[illegible]000-29-6-05.

PUBLIC WORKS DEPARTMENT.

CURRENT No. ~~656CE~~ 4773

ENCLOSURES. Plans No. 20, Others No. 3

Total

Received 4/x/ 1905.

Registered 7-10. 1905.

Passed on by Registering Clerk ...
,, ,, U. R. Clerk ...
,, ,, Referencer ...
,, ,, Record Superintendent.
,, ,, Drafting Officer ...

SPARE COPIES.

Subject.

Suruthur Kanmoy & Poolangudy Kanmoy etc.
Forwarding for sanction
3 estimates for improvements &

No. 656 CE

Station, Trichinopoly. *Dated the* 30 September 1905.

desp 2. 10.

From (Name) C. A. S M I T H Esquire.,

(Designation) Superintending Engineer, VI Circle.

To The Chief Engineer ~~The Secretary~~ ~~to the Government of Madras,~~
For Irrigation,
~~Public Works Department~~
M A D R A S.

Sir,

I have the honor to forward for your approval and sanction the marginally noted estimates for improvements to the works connected with the Periyar Project, in Melur Taluk. These works are included

1. Improvements to No. 113, Suruthur Kanmoy, Este. Rs. 1,820.	
-----Do----- for Repairs Rs. 85.	
2. -----Do----- to No. 111 Poolangudy, Estimate ... ... Rs. 1,460.	
-----Do----- for Repairs., 75.	
3. -----Do----- to Nos. 63 & 64 Devani and Ulligudy Kanmoy, Este. Rs. 1,590.	
-----Do----- for Repairs. 495.	

in the revised list of Periyar affected tanks - Melur Taluk, submitted with this office No. 446-C.E. dated --

5th July 1905.

2. It will be seen from the Executive Engineer's report attached to each estimate that the tanks have no proper surplus arrangements, or permanent masonry sluices for irrigation, nor are there bunds of the required section, the estimates are therefore prepared to provide adequate masonry surplus works and cement pipe sluices according to requirements in each case. Estimates have also been prepared for repairs required to the bund and sanctioned by the Executive Engineer, as noted in the report.

3. The works are unremunerative as they are required for the full development of the Project, and they may be expected to be completed by the end of March 1907. The estimates are -- recommended for sanction.

I have the honor to be,

Sir,

Your most obedient servant,

A. Smith
30/9

Suptg: Engineer, VI Circle.

P.V.
29-9-05.

NOTES.

C 6773
4/10/05

3

PUBLIC WORKS DEPARTMENT.

Irrigation Branch.

From the S.E. VI Circle No. 656 C.E. dated 30.9.05.

D.G.

Orders are requested whether the estimates may be checked for sanction.

2. The revised list of Periyar affected tanks, Melur taluk, in which the three tanks are stated to have been included, has been forwarded by the Rev. Dept. to the Collector for scrutiny and return.

asrr
4.10.05

Estes may be checked
[illegible]
4/10/05.

[illegible]
4/10/05

[E. I. Form No. 12—800—23-8-04.]

4/

Public Works Department,

Irrigation Branch.

DSJ

for orders

Current No. 4773

Letter No. 656 CE

Dated 2-10-05

From The SE 6th Circle (Mr C.A. Smith)
Prepared by E.E. Madura (Mr. C.V. Ramalingam)

NOTE by Technical Section.

Name of work. Improvements to
(1) Surathur Kanmoy Rs. 1820 2020
(2) Pulangudi Kanmoy. Rs. 1460 1460
(3). Devani & Ulligudi Kanmoy Rs. 1590 1190
Periyar affected Madura District

Amount of Estimate Rs. 4870.

(1) Surathur Kanmoy: Estimate Rs 1820.

Surplus arrangements - Combined catchment area = 1.70 sq miles; free = .67 sq mile. Disch = 610 c ft. A masonry calingulah 60½ ft long with damstones 9" high is proposed to be built to dispose of the surplus. There is a drop of 7 ft on to the apron. It is submitted that the roughstone grouted apron in rear may be altered to a masonry one and the earthen slopes at the ends of the 2nd apron may be revetted as shown in pencil. The bottom width of front wing and returns being inadequate may be increased to 3'-6" instead of 3'-0 & 2'-9 respectively.

Sluices. Extent of irrigation under the tank is 207 acres. 4 cement pipe sluices have been provided in lieu of the existing pot sluices.

9" pipe sluice at 1005 ft. Front returns 4'-6" long & 3'-6" high as shown in pencil should be added as the natural ground level is high & a leading chal has to be cut.

12" pipe sluice at 2350 ft - Returns to wings should be added in front as shown in pencil.

5

2. Pulangudi Kanmoy. Estimate Rs 1460.

Surplus arrangements. Combined Catchment = 2.56 sq miles. Free basin = 0.86 sq mile. Disch = 791 cft per sec.

A masonry Calingulah 78 ft long with damstones 9" high has been allowed to dispose of the whole surplus. The earth slopes at the ends of the 2nd apron require to be revetted to the width of the apron as shown in pencil on section. — app^d.

Sluices. Area of cultivation under the tank is = 141 acres. There are at present 1 masonry & 4 pot sluices. It is reported that the front head & barrel of the existing masonry sluice are out of order. The Estimate provides for constructing a piped barrel with a new masonry head to the existing masonry sluice & for providing one masonry & one pipe sluices in lieu of the pot sluices.

Proposed masonry sluice at 934 ft. It is submitted that revetment at a slope of 1 to 1 may be provided for earth slopes of the leading chal in front & rear for the safety of the returns. — very well

Improving existing masonry sluice at 2445 ft. Soil & sub. soil = hard clay. It is submitted that the depth of the concrete foundations of the front head may be increased from 2 to 2½ ft & the earth slopes of the leading chal in front revetted as shown.

Sluice at 2833 ft. Returns to be added to the wings in front and the sides of the leading chal in front & rear to be revetted as shewn in pencil. — yes.

6)

3. Devani and Velligudi Konmoyi Estimate Rs. 1590

These two tanks are situated very close to each other with their bunds in continuation and same F.T.L. They have now been treated as one as the cost of improving the combined tank being cheaper than that maintaining them separately. Combined Ayacut area = 119 acres.

Surplus arrangements: Combined catchment = 4.25 sq. miles free = 1.56 sq. mile. Disch = 1073 cft per sec. to be provided for. The surplus at present passes out through a breach in each tank. It is proposed to construct 2 calingulahs 5½ ft + 53½ ft long with the damstones 9" high at the right & left flanks respectively. In the absence of masonry wings & returns at the ends it will be safer to revet the ends at a slope of 1½ to 1 instead of 1 to 1 as allowed. It is submitted that the rough stone apron in rear of the calingulah at right flank may be altered to a masonry one as the drop is 6 ft. No cross sections have been submitted to see if the ground levels at the left flank will admit a paved byewash in lieu of the calingulah provided for. vide Longl. sections.

Yes.

yes make it masonry for both of them

Sluices. 3 cement pipe sluices are proposed to be built in lieu of the 4 existing pot sluices.

9" Pipe sluice at C.S. 1010. - The head wall & platform in front should be raised to M.W.L. & wings with returns allowed as shewn in pencil. The depth of concrete foundations under the head in front may be increased from 1-6" to 2 ft. The rear retaining ~~retaining~~ wall may be raised by 1 ft & the slopes of the leading chal. revetted as shewn in pencil

It will do as it is. but should be raised to M.W.L. & 2 ft foundn may be given

1

12" pipe sluice at C.S. No 16. The head wall and platform in front should be raised to M.W.L. and returns to the wings added as shewn in pencil.

It will do if raised to M.W.L.

9" pipe sluice at C.S. No 16. The head wall and platform in front should be raised to M.W.L. and wings with returns to be provided. The depth of Concrete foundation, under the head in front to be increased from 1½ to 2 ft. (soil + subsoil: clay + pretty hard clay)

Returns are necessary, please see plan.

ditto

Revetts allowed
Concrete foundation increased

Orders are requested if the additions and alterations referred to above may be carried out and the Estimates altered accordingly.

These Estimates after they are revised will be kept in the office until the revised list of the Periyar affected tanks in Melur taluk which has been sent to the Revenue department for approval is received.

Ino
25/xi/05.

Seen
[signature] 27. xi. 05.

(1) The sketch on long[l] section showing connection of new bund with old is not understood as there does not appear to be any new bund. The apron of the calingulah should be of masonry. Front wings of sluice at 1000 ft may be altered as proposed. Sluice at 2350 ft ditto

8)

2. Improving existing sluice
This amounts practically to reconstruction & it will be better to rebuild entirely than save only the rear cistern at the cost of a bad joint between new & old work.

Vide also notes in margin. All these petty alterations which ought not to be necessary cause ~~[illegible]~~ loss of time here. Designs should be submitted suited to the conditions of each case.

TWHS
28/11/05.

789

The estimates have been checked and the amounts increased as shewn below owing to the

(1) Suvathur Kuruvi from Rs 1820 to 2020 (2) Pulanguli .. — .. Rs 1460 to 1660 (3) Devanisellipatti .. .. Rs 1590 to 1820	alterations carried out in this office in the designs of the Calingulahs and sluices.

[illegible]
12.XII.05

Dos
9/12/05 DS

Draft Order submitted for approval.

[illegible]
16.12.05

F. 1. Form No. 1.

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

CURRENT No. 276 PROCEEDINGS OF THE MADRAS GOVERNMENT.
PASSED ON BY 9/1/06 9.1.06
R. C.
U. R. G.
REF.
R. K.
D. O.

1880

READ the following

From the Supg. Engineer, VI Circle, dated 2-10-05 No.656 C.E.

Print Reports.

Note by the Chief Engineer
for Irrigation.

---

5 P

1. Suruthur Tank- Est Rs. 1,820
2. Poolangudy Tank---- 1,460
3. Devani and Ulligudy tanks.---) ---1,590

The Supg. Engineer, VI Circle, submits estimates for improving the marginally noted tanks connected with the Periyar Project. It is reported that the tanks have no proper surplus works in consequence of which there is considerable wastage of water. It is therefore proposed to construct two calingulahs, one in each of the first two tanks in order to discharge the maximum quantity of water likely to enter them. With regard to the Devani and Ulligudy tanks, it is proposed to form them into one tank as their bunds are contiguous and their F.T.L the same, and to construct two calingulahs, one at each flank of the combined tank. Provision is also made in the estimates for replacing the existing pot sluices by masonry and cement pipe sluices. The above estimates have been increased to Rs.2,020, Rs.1,660 and Rs.1,820 respectively, owing to alterations made in this office in the design of the calingulahs and sluices, which are indicated on the plans.

F E D

CS

Please stamp plans and return file

Stamped

The designs have not been carefully adapted to the conditions of each case.

10

The estimates as altered are recommended for sanction.

Order N. 36 I. d 10.1.1906

Irrgn Asst

The following estimates are sanctioned:-

Imperial

Irrigation

49. Capital expenditure not charged to revenue

Periyar Project

Open Capital Account

I. Works

3. Distributaries

C. Works

Unremunerative work

1 Improving the Suruthur tank

Estimate I Works	Rs.	2,020
II Establishment		465
		2,485

2. Improving the Poolangudy tank

Estimate I Works	Rs.	1,660
II Establishment		382
		2,042

3. Improving the Devani and Ulligudy tanks

Estimate I Works	Rs.	1,820
II Establishment		419
		2,239

2. These sanctions are registered as No. 171 I, ~~I and I~~ of 1905-06 and will expire on the 31st March 1907.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

DESPATCHED -1 FEB 1906

Endorsement N. 37 I. d 10. 1. 1906

Forwarded.

TWSS 18/12/05.

Issue 1.1.06 I

To

The Chief Engr. for Irrgn.
" S.E.VI (with plans & Estes)
" Examiner P.W. Accounts.

DESPATCHED -1 FEB 1906

16.12.05

6P

6